BISS Biodiversity Information Science and Standards

Biodiversity Information Science and Standards 5: e73796
doi: 10.3897/biss.5.73796

OPEN ACCESS

Conference Abstract

Knowledge Graphs

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Received: 01 Sep 2021 | Published: 01 Sep 2021

Citation: Page R (2021) Knowledge Graphs. Biodiversity Information Science and Standards 5: e73796.
https://doi.org/10.3897/biss.5.73796

Abstract

Knowledge graphs embody the idea of "everything connected to everything else." As attractive as this seems, there is a substantial gap between the dream of fully interconnected knowledge and the reality of data that is still mostly siloed, or weakly connected by shared strings such as taxonomic names. How do we move forward? Do we focus on building our own domain- or project-specific knowledge graphs, or do we engage with global projects such as Wikidata? Do we construct knowledge graphs, or focus on making our data "knowledge graph ready" by adopting structured markup in the hope that knowledge graphs will spontaneously self-assemble from that data? Do we focus on large-scale, database-driven projects (e.g., triple stores in the cloud), or do we rely on more localised and distributed approaches, such as annotations (e.g., hypothes.is), "content-hash" systems where a cryptographic hash of the data is also its identifier (Elliott et al. 2020), or the growing number of personal knowledge management tools (e.g., Roam, Obsidian, LogSeq)? This talk will share experiences (the good, bad, and the ugly) as I have tried to transition from naïve advocacy to constructing knowledge graphs (Page 2019), or participating in their construction (Page 2021).

Keywords

biodiversity knowledge graph, linked data

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Presented at

TDWG 2021

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